

Recurrent Retroperitoneal Liposarcoma Case Report

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Abstract

Introduction: Soft tissue Sarcomas accounts for about 1%-2% of all malignant tumour in adults with an estimated incidence of 4-5 casesper/1,00,000/year.About 20% of adult soft tissues are located in retroperitoneum.Retroperitoneal liposarcoma is the most common variant and accounts for more than 50% of retroperitoneal sarcomas . Relapse after surgery is frequent and tend to be more aggressive.

Case Report:

Female patient came with chief complains of abdominal pain since 3 months , which has increased in intensity since last 10 days. Abdominal pain that was noticed by patient 1 month back. Previously 10years back patient has undergone laparotomy for retroperitoneal tumour which has been reported as well differentiated liposarcoma. CECT Abdomen has done that showed a huge retroperitoneal tumour for which laparotomy with resection of the complete tumour was done. Histopathological examination has been reported as well differentiated liposarcoma.

Discussion :

Retro peritoneal liposarcomas are the most common type of soft tissue tumors that arise in retroperitoneum. Peak age of presentation is in between 40-55years. Often patient is asymptomatic till the tumour attains large size. Complete resection of the tumour is the ideal treatment.

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I. Case Report

Female patient of age 55 years came with chief complains of abdominal pain since 3 months which is of dragging type, non radiating, continuous with no aggravating or relieving factors. Pain has increased in intensity since last 10 days. Pain is associated with abdominal mass that was occupying right side of the abdomen which was noticed by patient 1 month back which has suddenly increased in size to attain current size. There was no history of altered bowel habits. There was no history of jaundice, pruritis, passage of clay coloured stools. There was no history of haematemesis or malena. There was no history of any comorbidities. Patient has underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy for leiomyoma uterus 10 years back. Patient had similar complains 9 years back and diagnosed to have retroperitoneal tumour for which she underwent laparotomy and resection of the tumour was done and post-operative histopathology has been reported as well differentiated liposarcoma. Post Operatively 30 cycles of radiotherapy has been given. Now CECT abdomen has been taken which has showed reduced retroperitoneal tumour of size 20cm*20cm*15cm that is compressing the right kidney and liver anteriorly and inferior venacava and abdominal aorta medially (Fig 1 and 2). Patient has been provisionally planned for laparotomy with right nephrectomy with right hemicolectomy. Laparotomy has been done, intraoperatively the fat planes are well maintained between the tumour and kidney, liver , colon, and all major vessels. Complete resection of the tumour has been done(Figure 3).Post operative specimen has measured 25*23*18cms and 3.5kgs (fig 4).Post Operative the recovery of the patient was uneventful. Histopathology of the specimen has been reported as well differentiated liposarcoma. Post operatively patient has been sent to radiotherapy.

II. Discussion

The overall incidence of retroperitoneal sarcomas is 0.3 to 0.4% per 1,00,000 population. Primary tumours of retro peritoneum can be of many types: tumours arising from the kidney, adrenal gland, retroperitoneal lymph nodes and retroperitoneal liposarcomas , lipomas ,leiomyosarcoma , malignant fibrous histiocytoma etc(1).

Liposarcomas are the most common type of soft tissue sarcomas that arise in retroperitoneum . Mean age of presentation is 54.1 years (2). These tumours are often deep seated and often attain large size by the time of presentation as retroperitoneum provides potential space for sizeable growth , prior to the development of symptoms. These tumours often present with diffuse abdominal pain with abdominal mass, urinary symptoms,

GIT symptoms. Investigation of choice is CT scan which demonstrates the fat plane between the tumour and abdominal viscera. Complete resection of the tumour followed radiotherapy is the ideal treatment .

Liposarcomas based on the morphological features and cytogenetic aberrations that is classified in to 4 types. 1. Well differentiated liposarcoma, 2. Dedifferentiated liposarcoma, 3. Myxoid liposarcoma, 4. Pleomorphic liposarcoma (3). The extent of differentiation has reflected by the histological grade , remains the most important determinant of prognosis after surgical resection (3).

Various other factors that influence the recurrence of the tumour include growth rate, surgical resection and size of the tumour (4). Based on the review of literature average time for the first local recurrence varies between 39 months to 45 months (4). If the growth rate of tumour is >1cm/month , it is related to the major incidence of recurrence. The average growth rate is 0.34cm/month (4).

The anatomical distribution of the liposarcoma is closely related to the histological type , myxoid and pleomorphic variant are found to be common in extremities whereas well differentiated and dedifferentiated variants are common in retroperitoneum (3). Well differentiated liposarcoma may recur locally , but the metastatic potential is low , while pleomorphic , dedifferentiated liposarcomas have high metastatic potential that reduce the survival rate (5). Well differentiated and dedifferentiated have distinct biological behaviours . Gross total resection is possible in most well differentiated liposarcomas unlike the dedifferentiated variant. (6).

Retroperitoneal liposarcomas have less favourable prognosis than the liposarcomas of extremities (4). Enzinger and Winslow reported a 5 year survival rate of 71% for liposarcomas of extremities compared to 39% for the retroperitoneal origin (5).

Analysis of literature indicated that complete resection of retroperitoneal liposarcoma is the most important factor that decides the risk of recurrence of the tumour. However complete resection is often challenging in such conditions resection of the involved organ is done along with the tumour.

III. Conclusion

Retroperitoneal liposarcomas often have delayed presentation. Surgery is the most effective mode of treatment. Complete resection is at most important in order to prevent recurrence , although recurrence also depends on other factors like histological type.

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(Fig 1 plain CT showing retroperitoneal tumour displacing kidney and liver)



(Fig 2 contrast CT showing fat planes between liver , kidney and tumour)



(Fig 3 showing intra operative excision)



Fig 4 showing post operative specimen

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